

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (cancelled)
2. (cancelled)
3. (cancelled)
4. (cancelled)
5. (cancelled)
6. (currently amended) A method of acoustically rendering a virtual environment including:
receiving a set of polygons generated for a graphical display;
selecting a first subset of the polygons for an acoustic display;
selecting a second subset of the polygons for the acoustic display;
determining acoustic reflections from a sound source that bounce off of the
polygons in the first subset of polygons to a listener position in the virtual environment, wherein
determining acoustic reflections from a sound source that bounce off of the first subset of
polygons to a listener position in the virtual environment is calculated less frequently than
determining whether a polygon in the second subset of polygons causes an occlusion of the
sound source at the listener position;
determining whether a polygon in the second subset of polygons causes an
occlusion of the sound source at the listener position; and
generating a play list of sounds based on the reflections and the occlusions.
~~—— A method of acoustically rendering a virtual environment as recited in claim 3~~
~~wherein determining acoustic reflections from a sound source that bounce off of the first subset~~
~~of polygons to a listener position in the virtual environment is calculated less frequently than~~
~~determining whether a polygon in the second subset of polygons causes an occlusion of the~~
~~sound source at the listener position.~~
7. (cancelled)
8. (cancelled)
9. (cancelled)

10. (cancelled)
11. (cancelled)
12. (cancelled)
13. (cancelled)
14. (cancelled)
15. (cancelled)
16. (cancelled)
17. (cancelled)
18. (cancelled)
19. (cancelled)
20. (cancelled)
21. (cancelled)
22. (cancelled)
23. (cancelled)
24. (new) A method of acoustically rendering a virtual environment as recited in claim 6, wherein the first subset of the polygons is smaller than the second subset.
25. (new) A method of acoustically rendering a virtual environment as recited in claim 6, wherein the first subset of the polygons is selected for an acoustic display from the set of polygons generated for a graphical display by applying a size filter.
26. (new) A system for acoustically rendering a virtual environment including:
 - a processor configured to:
 - receive a set of polygons generated for a graphical display;
 - select a first subset of the polygons for an acoustic display;
 - select a second subset of the polygons for the acoustic display;
 - determine acoustic reflections from a sound source that bounce off of the polygons in the first subset of polygons to a listener position in the virtual environment, wherein determining acoustic reflections from a sound source that bounce off of the first subset of polygons to a listener position in the virtual environment is calculated less frequently than determining whether a polygon in the second subset of polygons causes an occlusion of the sound source at the listener position;

determine whether a polygon in the second subset of polygons causes an occlusion of the sound source at the listener position; and
generate a play list of sounds based on the reflections and the occlusions;
and
a memory coupled to the processor and configured to provide instructions to the processor.

27. (new) A system for acoustically rendering a virtual environment as recited in claim 26, wherein the first subset of the polygons is smaller than the second subset.

28. (new) A system for acoustically rendering a virtual environment as recited in claim 26, wherein the first subset of the polygons is selected for an acoustic display from the set of polygons generated for a graphical display by applying a size filter.

29. (new) A computer program product for acoustically rendering a virtual environment, the computer program product being embodied in a computer readable medium and comprising computer instructions for:

receiving a set of polygons generated for a graphical display;
selecting a first subset of the polygons for an acoustic display;
selecting a second subset of the polygons for the acoustic display;
determining acoustic reflections from a sound source that bounce off of the polygons in the first subset of polygons to a listener position in the virtual environment, wherein determining acoustic reflections from a sound source that bounce off of the first subset of polygons to a listener position in the virtual environment is calculated less frequently than determining whether a polygon in the second subset of polygons causes an occlusion of the sound source at the listener position;

determining whether a polygon in the second subset of polygons causes an occlusion of the sound source at the listener position; and

generating a play list of sounds based on the reflections and the occlusions.

30. (new) A computer program product as recited in claim 29, wherein the first subset of the polygons is smaller than the second subset.

31. (new) A computer program product as recited in claim 29, wherein the first subset of the polygons is selected for an acoustic display from the set of polygons generated for a graphical display by applying a size filter.